electronic interfaces for pre-ordering, ordering, and provisioning discussed below.²⁵¹ The LCSC also handles manual processing of orders for services not supported by the electronic interfaces. In addition, if there is an error in the processing of an order, the LCSC either manually processes the order or notifies the new entrant of the error. Moreover, each new entrant is assigned a customer support manager at the LCSC who acts as a single point of contact for any "operational issues that are not satisfactorily resolved by the normal center process."²⁵²

91. Pre-ordering generally includes those activities that a carrier undertakes with a customer to gather and confirm the information necessary to place an order. BellSouth provides an electronic interface, the Local Exchange Navigation System (LENS), for pre-ordering of both resale services and unbundled network elements. LENS is a proprietary terminal-type interface that allows a competing carrier to use a browser software program to retrieve information from a BellSouth server on a real-time basis. Competing carriers can connect to LENS through dedicated local area network (LAN-to-LAN) connections, through dial-up connections, or through the public Internet. LENS has two modes, an "inquiry" mode and a "firm order" mode. The inquiry mode provides pre-ordering information and allows a competing carrier to access only those pre-ordering functions that the carrier needs. The firm order mode requires a competing carrier to perform each pre-ordering function in sequence, as if placing an order. LENS also has some ordering functionality when used in

BellSouth Application, App. A, Vol. 4a, Tab 12, Affidavit of William N. Stacy (BellSouth Stacy OSS Aff.), Ex. WNS-52 (Local Competition Operational Readiness Report) at 9, 49.

²⁵² BellSouth Stacy Performance Measures Aff. at para. 4.

²⁵³ See 47 C.F.R. § 51.5.

Department of Justice Evaluation, App. A at 10; South Carolina Commission Compliance Order at 35; AT&T Comments, App., Vol II, Ex. C, Affidavit of Jay M. Bradbury (AT&T Bradbury Aff.) at para. 9; BellSouth Stacy OSS Aff. at paras. 6, 12; MCI Comments, Ex. A, Declaration of Samuel L. King (MCI King Decl.) at paras. 34, 40, 43; Sprint Comments, App. B, Affidavit of Melissa L. Closz (Sprint Closz Aff.) at paras. 46, 48. BellSouth, pursuant to its interconnection agreement with AT&T, is developing a machine-to-machine interface for pre-ordering that is scheduled to be available in December 1997. BellSouth Stacy OSS Aff. at para. 42 and Ex. WNS-21. We do not consider this interface in this application because it was not offered at the time BellSouth filed its application. See Department of Justice Evaluation, App. A at 10-11.

²⁵⁵ BellSouth Stacy OSS Aff. at para. 10 & Ex. WNS-48 (LENS User Guide) at 3-4, 6.

²⁵⁶ *Id.* at para. 11.

²⁵⁷ Id. at paras. 11, 19; BellSouth Reply Comments, App. A, Tab 7, Reply Affidavit of William N. Stacy (BellSouth Stacy OSS Reply Aff.) at para. 25.

AT&T Bradbury Aff. at para. 82; BellSouth Stacy OSS Aff. at para. 11; MCI King Decl. at paras. 51 n.7, 72 n.12.

the firm order mode, but, as discussed below, BellSouth relies on another interface as its primary ordering interface to meet the OSS requirements of section 271.²⁵⁹

92. Ordering includes the exchange of information necessary for a competing carrier to order services and products from the BOC.²⁶⁰ Provisioning includes those activities necessary to install services and products to the competing carrier and its customers as well as the exchange of information necessary to inform competing carriers on the status of that work.²⁶¹ BellSouth provides an electronic interface utilizing the Electronic Data Interchange (EDI) protocol to meet its obligation to provide nondiscriminatory access to requesting telecommunications carriers for ordering and provisioning of resold services.²⁶² The EDI protocol enables BellSouth both to receive resale orders electronically from competing carriers and to transmit information to competing carriers concerning the status of their orders.²⁶³ BellSouth has deployed two versions of EDI, one that it jointly developed with AT&T, and a second one that it generally offers to other new entrants.²⁶⁴ In addition, BellSouth offers a software package called PC-EDI that enables competing carriers to use the EDI interface without the use of their own operations support systems.²⁶⁵ For the ordering and provisioning of unbundled network elements, BellSouth accepts orders for loops, interim number portability and switching through its EDI interface, and for other network elements, such as transport, through its EXACT interface. BellSouth's EXACT interface is also used by interexchange carriers to order access services from BellSouth.²⁶⁶

See infra para. 94.

²⁶⁰ See 47 C.F.R. § 51.5.

²⁶¹ Ia

EDI has been adopted by the Ordering and Billing Forum (OBF) of the Alliance for Telecommunications Industry Solutions (ATIS) as the industry standard for the ordering and provisioning of resale services. See Transcript of Forum on Operations Support Systems for Unbundled Network Elements and Resale Services in Docket No. 96-98 (May 28-29, 1997), Ordering and Billing Forum Attachment, "Overview: Industry Guidelines for Operations Support Systems Functions."

BellSouth's EDI interface supports electronic ordering for 34 resale services. BellSouth states that these 34 services comprise 80 percent of its overall retail revenue. BellSouth Stacy OSS Aff. at para. 58 & Ex. WNS-27.

BellSouth states that its current EDI interface is compliant with version 6 of the OBF standard, and that BellSouth is committed to implementing version 7 in early 1998. BellSouth Stacy OSS Aff. at para. 50. The OBF published the standards for version 7 on July 28, 1997. See id.

BellSouth worked with a third-party software developer, Harbinger, to create a personal computer-compatible software package for smaller competitive carriers to use with the EDI interface. *Id.* at paras. 50, 138.

²⁶⁶ *Id.* at para. 113.

- 93. BellSouth uses several systems to process competing carriers' orders received through the EDI interface, including the local exchange ordering (LEO) system, the local exchange service order generator (LESOG) system, and the Service Order Control System (SOCS).²⁶⁷ Orders are initially reviewed by the LEO system for correctness and completeness. Orders supported by mechanized processing are then sent to the LESOG system which translates the EDI order into a format that can be accepted by the SOCS system.²⁶⁸ The SOCS system then generates a valid service order that it sends to the appropriate BellSouth legacy systems, and creates a firm order confirmation (FOC) notice that is sent to competing carriers via the EDI interface.²⁶⁹ If one of these systems encounters an error in the processing of a competing carrier's order, the order is sent to BellSouth's local carrier service center (LCSC) for manual processing.²⁷⁰ As noted above, the LCSC will either correct the order and resubmit it for completion, or manually return an error notice to the ordering carrier.²⁷¹ Finally, when an order is completed, the SOCS system creates an order completion notice that is sent to the ordering carrier via the EDI interface.²⁷²
- 94. As indicated above, BellSouth also provides ordering functionality through its LENS interface when LENS is used in the firm order mode.²⁷³ BellSouth, however, states that it does not rely on the LENS interface to provide competing carriers with nondiscriminatory access to ordering functions.²⁷⁴ BellSouth states that "LENS was designed

Although the LEO and LESOG systems are used exclusively for processing orders from competing carriers, the SOCS system processes both orders from competing carriers and BellSouth's retail operations. See id. at paras. 57, 76, 78.

²⁶⁸ *Id.* at paras 75-76.

²⁶⁹ Id. Generally, a FOC notice informs a competing carrier that an order has been accepted by the BOC and confirms the requested due date for completion. See Ameritech Michigan Order at para. 172 n.429.

Certain services, such as Basic Rate ISDN, are not currently supported by mechanized processing and are sent directly to the LCSC. BellSouth Stacy OSS Aff., Ex. WNS-27.

²⁷¹ Id. at paras. 75-76. As discussed further below, BellSouth provides error notices to competing carriers via facsimile. In response to error notices, competing carriers can provide additional information to the LCSC representative, or submit a corrected order through the EDI interface. Id. at para. 77.

²⁷² *Id.* at paras. 75-76.

²⁷³ See supra para. 91.

²⁷⁴ BellSouth Application at 27; BellSouth Stacy OSS Aff. at para. 46; see also Florida Commission, Consideration of BellSouth Telecommunications, Inc.'s Entry into InterLATA Services Pursuant to Section 271 of the Federal Telecommunications Act of 1996, Docket No. 960786-TL, Order No. PSC-97-1459-FOF-TL (Nov. 19, 1997) (Florida Commission Section 271 Order) at 66; BellSouth Stacy OSS Reply Aff., Ex. WNS-1 at 28, North Carolina Commission, Public Staff Proposed Order in the Matter of Application of BellSouth Telecommunications, Inc., to Provide In-Region, InterLATA Services Pursuant to Section 271 of the Telecommunications Act of 1996, Docket No. P-55, SUB 1022 (Oct. 31, 1997) (North Carolina Public Staff

primarily as a pre-ordering tool for [competing carriers] and is not intended to support all large-scale ordering functions."²⁷⁵ BellSouth acknowledges that LENS ordering functionality is limited to a subset of the order types and activity types provided by the EDI interface.²⁷⁶ We therefore do not evaluate the adequacy of the LENS interface in making our determination as to whether BellSouth provides nondiscriminatory access to ordering and provisioning functions.²⁷⁷

95. For its retail operations, BellSouth uses two interfaces, the Regional Negotiation System (RNS) and Direct Order Entry (DOE), both of which provide pre-ordering and ordering functions on an integrated basis.²⁷⁸ RNS, which is currently used for most residential services, is a newer system with "English-language and point-and-click capabilities."²⁷⁹ For business services and certain residential services that are not yet supported by RNS, BellSouth still uses DOE, an older system that relies on special codes and function keys.²⁸⁰

3. General Approach to Analyzing Operations Support Systems

96. In the Ameritech Michigan Order, the Commission discussed the approach it would take to review whether a BOC was providing competing carriers with nondiscriminatory access to operations support systems. As in the Ameritech Michigan Order, we undertake a two-part inquiry in making this evaluation. First, we evaluate "whether the BOC has deployed the necessary systems and personnel to provide sufficient access to each of the necessary OSS functions and whether the BOC is adequately assisting competing carriers to understand how to implement and use all of the OSS functions available

Proposed Order).

²⁷⁵ BellSouth Reply Comments at 46-47.

BellSouth Stacy OSS Aff. at para. 46; BellSouth Reply Comments at 46-47. For example, BellSouth states that, at the time of its application, "LENS does not allow CLECs to add or delete features, . . . only accepts orders of six lines or less, and only allows multi-line hunt group [orders] to be switched 'as is.'" BellSouth Reply Comments at 46-47.

See Department of Justice Evaluation, App. A at 21 n.32.

²⁷⁸ Id., App. A at 14; Florida Commission Section 271 Order at 83; AT&T Bradbury Aff. at para. 78; BellSouth Stacy OSS Aff. at para. 8; Intermedia Comments at 20; MCI Comments at 25; MCI King Aff. at para. 52; Sprint Comments at 13; Sprint Closz Aff. at para. 51.

²⁷⁹ BellSouth Stacy OSS Aff. at para. 8.

²⁸⁰ Id.

²⁸¹ Ameritech Michigan Order at paras. 133-43.

to them."²⁸² Second, we "determine whether the OSS functions that the BOC has deployed are operationally ready, as a practical matter."²⁸³ Under this second part of the inquiry, we examine performance measurements and other evidence of commercial readiness.²⁸⁴

- 97. The Commission concluded in the Ameritech Michigan Order that the most probative evidence that OSS functions are operationally ready is actual commercial usage. We recognize, however, that the Ameritech Michigan Order involved the review of an application filed under Track A, whereas we are reviewing BellSouth's application under Track B. Nevertheless, this inquiry into the operational readiness of the OSS functions still applies to a Track B application, because we must determine whether the checklist requirement that access to OSS functions is available, as a legal and practical matter, has been satisfied. In this case, because BellSouth's operations support systems are essentially the same throughout the region, we review the commercial usage of BellSouth's operations support systems in other states as part of the assessment of whether BellSouth is "generally offering" nondiscriminatory access to OSS functions. BellSouth invites such review by submitting data on commercial usage throughout its region to demonstrate compliance with the OSS requirements. The Commission also determined in the Ameritech Michigan Order that it would consider carrier-to-carrier testing, independent third-party testing, and internal testing, in the absence of commercial usage, to demonstrate commercial readiness. 288
- 98. For those OSS functions that are analogous to OSS functions that a BOC provides to itself -- including pre-ordering, ordering and provisioning for resale services -- a BOC must offer access to competing carriers equivalent to the access the BOC provides

ld. at para. 136. In making this determination, we "consider all of the automated and manual processes a BOC has undertaken to provide access to OSS functions to determine whether the BOC is meeting its duty to provide nondiscriminatory access to competing carriers." We also consider all of the components of a BOC's provision of access to OSS functions, including the "point of interface (or 'gateway') for the competing carrier's own internal operations support systems to interconnect with the BOC; any electronic or manual processing link between that interface and the BOC's internal operations support systems (including all necessary back office systems and personnel); and all of the internal operations support systems (or 'legacy systems') that a BOC uses in providing network elements and resale services to a competing carrier." Id. at para. 134 (footnote omitted).

²⁸³ *Id.* at para. 136.

²⁸⁴ *Id.* at para. 138.

²⁸⁵ *Id.* at paras. 110, 138.

²⁸⁶ See supra part VI.A.

See, e.g., BellSouth Stacy Performance Measures Aff. at para. 42 & Ex. WNS-9.

²⁸⁸ Ameritech Michigan Order at para. 138.

itself.²⁸⁹ Thus, for example, for those functions that the BOC itself accesses electronically, the BOC must offer electronic access for competing carriers.²⁹⁰ In addition, access to OSS functions must be offered such that competing carriers are able to perform OSS functions in "substantially the same time and manner" as the BOC.²⁹¹ Moreover, for those OSS functions that have no retail analogue, such as ordering and provisioning of unbundled network elements, a BOC must offer access sufficient to allow an efficient competitor a meaningful opportunity to compete.²⁹²

- 99. In sum, we reaffirm the finding in the Local Competition Order that "nondiscriminatory access to these support system functions . . . is vital to creating opportunities for meaningful competition." Moreover, in reviewing similar functions in the Ameritech Michigan Order, the Commission concluded that "these requirements with respect to access to OSS functions are readily achievable," because the BOC need only demonstrate that it is offering "the same access to competing carriers that it already provides to itself." 294
- 100. Furthermore, we note that any determinations regarding BellSouth's provision of nondiscriminatory access to OSS functions made by state commissions in the BellSouth region may be relevant to our inquiry in this application.²⁹⁵ As noted above, BellSouth's operations support systems are essentially the same throughout the region and BellSouth submitted data in the record in this proceeding on usage throughout its region to demonstrate

²⁸⁹ *Id.* at paras. 139-40.

²⁹⁰ Id. at para. 137; Local Competition Order, 11 FCC Rcd at 15767.

Local Competition Order, 11 FCC Rcd at 15763-64.

See Ameritech Michigan Order at para. 141; Local Competition Order, 11 FCC Rcd at 15660; Local Competition Second Reconsideration Order, 11 FCC Rcd at 19742-43. The Commission recognized, however, that, given sufficient churn in the marketplace, "win-backs of customers serviced by unbundled network elements might provide sufficient data with which to develop an appropriate measure of equivalent access." Ameritech Michigan Order at para. 141 & n.348. The Commission further recognized in the Ameritech Michigan Order that there may be situations in which a BOC contends that, although equivalent access has not been achieved for an analogous function, the access that it offers is still nondiscriminatory within the meaning of the statute, because it offers an efficient competitor a meaningful opportunity to compete. Id. at para. 141 n.345. We need not reach this issue in rendering our decision on this application, because BellSouth contends that it has deployed systems that offer equivalent access. See BellSouth Application at 21-22 ("BellSouth has modified its OSS to process CLEC transaction requests and has developed interfaces that allow CLECs to obtain access to resale services and unbundled elements at parity with BellSouth.").

²⁹³ Local Competition Order, 11 FCC Rcd at 15764.

²⁹⁴ Ameritech Michigan Order at para. 143.

²⁹⁵ See id. at para. 156; Department of Justice Evaluation at 15.

compliance with the requirements of section 271.²⁹⁶ Thus, as the Department of Justice points out in its evaluation, determinations with respect to this single region-wide system may, as a practical matter, affect states throughout a BOC's entire region.²⁹⁷ With respect to BellSouth's region-wide operations support systems, the South Carolina Commission determined that BellSouth's "electronic interfaces provide access to [BellSouth's] operational support systems for pre-ordering, ordering, maintenance and repair, and billing that is substantially the same as, and in many cases better than, that which it provides to [BellSouth's] retail customers."298 BellSouth also cites a determination from the Louisiana Commission and a proposed order of the North Carolina Commission's public staff,299 both of which found that BellSouth's provision of access to OSS functions satisfies the requirements of section 271.300 Other parties cite determinations from the Alabama, Florida, and Georgia commissions that, upon review of the very same functions, have concluded that BellSouth's operations support systems are deficient.³⁰¹ Because evidence gathered by other state commissions in the region is probative of BellSouth's offer of access to OSS functions in South Carolina, and because any determination we make in this proceeding regarding BellSouth's operations support systems will have an impact on other states in the region, we conclude that we may take into account any evidence gathered by these other state commissions in their evaluation of BellSouth's region-wide systems.

4. Analysis of Ordering and Provisioning Functions

101. For the reasons set forth below, we conclude that BellSouth has failed to demonstrate that it is providing nondiscriminatory access to OSS functions for the ordering and provisioning of resale services. As described above, BellSouth provides competing carriers access to an EDI interface to provide nondiscriminatory access for ordering and provisioning of resold services. BellSouth states that it has been capable of implementing an

Department of Justice Evaluation at 15 & App. A at 7; South Carolina Commission Compliance Order at 20, 35; ACSI Reply Comments at 11 n.24; AT&T Reply Comments at 2 n.2; BellSouth Application at 19, 23; BellSouth Milner Aff. at para. 5; BellSouth Stacy Performance Measures Aff. at paras. 4, 42 & Ex. WNS-9; Hyperion/KMC Comments at 5 n.3; MCI Comments at 11. Not only are the interfaces the same throughout BellSouth's region, but competing carriers are also assigned to one LCSC to handle their needs for the entire BellSouth region. See discussion supra para. 90.

Department of Justice Evaluation at 15.

South Carolina Commission Compliance Order at 33.

The North Carolina Commission will review the proposed order of its public staff and comments from other parties, and will then issue its decision.

BellSouth Stacy OSS Reply Aff. at paras. 4-10 & Ex. WNS-1.

See, e.g., Department of Justice Evaluation, App. A at 8-9; ACSI Reply at 11 & n.27; ALTS Reply Comments at 5-7; AT&T Comments at 25 n.20; AT&T Reply Comments at 1-2, 13-14; Hyperion Reply Comments at 4-5; MCI Reply Comments at 3 & n.1.

EDI interface with any requesting carrier since December 1996.³⁰² Competing carriers, however, had only recently begun to use EDI for ordering at the time of BellSouth's application. For example, evidence in the record indicates that AT&T has used EDI to transmit orders since June 1997.³⁰³ At the time of its application, BellSouth states that an additional four carriers were using the PC-EDI software to transmit commercial resale orders through the EDI interface.³⁰⁴ In addition, MCI states that it is currently testing BellSouth's EDI interface to transmit orders from MCI's own OSS.³⁰⁵ In August, the most recent month for which data is available, BellSouth received, on a region-wide basis, 6715 orders through its EDI interface.³⁰⁶

102. In the Ameritech Michigan Order, the Commission concluded that, because the ordering and provisioning of resale services by a competing carrier is analogous to the ordering and provisioning of a BOC's retail services by the BOC to its own customers, a BOC must provide to competing carriers access to OSS functions equivalent to the access provided to its retail operations.³⁰⁷ In that order the Commission agreed with the Department of Justice that "[p]roviding resale services in substantially the same time as analogous retail services is probably the most fundamental parity requirement in Section 251."³⁰⁸ The Commission further concluded that a BOC's submission of data showing the average

BellSouth Stacy OSS Aff. at para. 54.

³⁰³ Id., Ex. WNS-52 (Local Competition Operational Readiness Report) at 132.

BellSouth Application at 27; see BellSouth Stacy OSS Aff. at para. 54.

MCI King Decl. at para. 97 (MCI began testing in early September). At the time of BellSouth's application, MCI was the only new entrant testing the second version of BellSouth's EDI interface with the use of its own OSS.

Letter from Michael Kellogg, Kellogg, Huber, Hansen, Todd & Evans, to William Caton, Acting Secretary, FCC (Oct. 15, 1997). This letter attached a redacted public version of exhibit 41 to the BellSouth Stacy OSS affidavit, which will be cited hereinafter as "Public Ex. WNS-41." Exhibit WNS-41 provides data for carriers using both the EDI and LENS interfaces. Because BellSouth expressly relies on only its EDI interface to provide nondiscriminatory access for ordering and provisioning, we look only to the data concerning carriers using the EDI interface. By consulting with BellSouth, we have extracted data for those carriers using EDI. We urge BellSouth, however, in future applications, to sufficiently disaggregate its data to permit analysis of the performance of those interfaces upon which it is expressly relying on in its application.

³⁰⁷ Ameritech Michigan Order at para. 166.

³⁰⁸ Id. at para. 167. (quoting Department of Justice Evaluation, Docket No. 97-137, App. A at 12 (filed June 25, 1997) (Department of Justice Ameritech Michigan Evaluation)).

installation intervals for the provision of both its retail and resale services is fundamental to a demonstration of nondiscriminatory access to OSS functions.³⁰⁹

103. Applying the standards adopted in the Ameritech Michigan Order, we find that BellSouth has failed to demonstrate that it is providing nondiscriminatory access to OSS functions for the ordering and provisioning of resale services. There is convincing evidence in the record that BellSouth's OSS functions for the ordering and provisioning of resale services contain significant deficiencies. Competing carriers using the EDI interface to order resale services are experiencing a high order rejection rate that has decreased significantly BellSouth's ability to process competing carriers' orders without additional human intervention. In addition, BellSouth has not provided to competing carriers information on the status of their orders in a timely manner. As discussed more fully below, we find that these deficiencies are significant and prevent competing carriers from providing service to their customers at parity with BellSouth's retail operations. Indeed, the inadequate performance of the EDI interface has led one carrier, LCI, to stop using it and return to submitting orders manually.³¹⁰ Moreover, these significant deficiencies are occurring with a relatively small volume of orders for resale of simple POTS services.³¹¹ We are therefore concerned that the problems with BellSouth's EDI interface will only increase as more competing carriers enter the market, and the number and complexity of services ordered by those carriers increases.

a. Order Rejections

104. It is critical to a competing carrier providing service by reselling the BOC's services that the competing carrier have its orders processed through the BOC's systems in substantially the same time and manner as the BOC's retail operations. Without such equivalent access, the competing carrier will be unable to provide service to its customers in a manner that is competitive with the BOC. Therefore, the BOC is obligated to demonstrate that it is offering competing carriers the ability to order services for resale on a nondiscriminatory basis. When BellSouth representatives place an order, the overwhelming majority of those orders automatically flow through BellSouth's ordering systems and databases. In fact, according to the Department of Justice, 97 percent of BellSouth's residential orders and 81 percent of its business orders are processed without additional human intervention once the order is submitted by the BellSouth service representative.³¹²

Ameritech Michigan Order at para. 171. The Commission also found that, more generally, Ameritech failed to provide appropriate empirical evidence upon which the Commission could determine whether a BOC is providing nondiscriminatory access to OSS functions. *Id.* at paras. 203-213.

LCI Comments, App. 1, Declaration of Betty Baffer (LCI Baffer Decl.) at para. 6.

The term "POTS" or "plain old telephone service" refers to the most basic types of telecommunications services offered by local exchange carriers to their customers. *Ameritech Michigan Order* at n.433.

Department of Justice Evaluation, App. A at A-22.

As discussed above. BellSouth states that it has similarly mechanized the order processing for most of the services competing carriers can electronically order through the EDI interface.³¹³ That is, a competing carrier service representative can send an order for service through the BOC's ordering systems without the need for BOC service representatives to intervene in the ordering process. The evidence in the record demonstrates that, in actual practice, the majority of orders submitted by competing carriers via the EDI interface do not mechanically flow through BellSouth's systems. Instead, these orders are rejected by BellSouth's systems and then require human intervention from BellSouth representatives for resolution.³¹⁴ BellSouth's data demonstrate that, in July 1997, 75 percent of the orders submitted by competing carriers via the EDI interface were rejected due to errors; that is, only 25 percent flowed through BellSouth's systems without the need for human intervention.³¹⁵ In August 1997, 60 percent of the orders were rejected.³¹⁶ Evidence in the record suggests that, for example, AT&T and MCI must submit orders an average of 1.7 times before acceptance by BellSouth's systems, adding significant delay to the ordering process.³¹⁷ The high number of order rejections is of particular concern because they are occurring for resale orders for simple POTS services, which should be among the easiest orders to submit and process.³¹⁸ We would expect BellSouth to process orders for simple POTS services in substantially the same and time and manner (i.e., an equivalent level of mechanized processing) as it does for itself. Moreover, the data show that these high rejection rates apply to all of the carriers using the EDI interface.³¹⁹ Therefore, the number of orders from competing carriers that BellSouth is successfully processing on a mechanized basis is, in fact, quite low.

106. In addition, the impact of the high order rejection rate is compounded because BellSouth does not notify competing carriers electronically that an order has been rejected. Instead, BellSouth personnel either send an error notice via facsimile to the competing carrier, or they undertake to resolve the problem and resubmit the order for continued processing.³²⁰

See BellSouth Application at 28.

³¹⁴ Public Ex. WNS-41.

³¹⁵ *Id*.

³¹⁶ Id

AT&T Bradbury Aff. at para 214.

³¹⁸ See Ameritech Michigan Order at para. 173. The two carriers with the highest use of BellSouth's EDI interface to date are AT&T and Intermedia. Both parties assert that the overwhelming majority of orders they have sent via the EDI interface were for migrating existing BellSouth customers without changes to their accounts. See, e.g., Intermedia Comments at 23.

Public Ex. WNS-41.

³²⁰ Id. at paras. 75-76.

This error notice process, as discussed below,³²¹ causes significant delays and hinders new entrants' ability to compete effectively.

- We believe that this substantial disparity between the flow-through rates of BellSouth's orders and those of competing carriers, on its face, demonstrates a lack of parity. In the Ameritech Michigan Order, the Commission found a direct correlation between mechanized order processing and the BOC's ability to provide competing carriers with nondiscriminatory access to OSS functions. 322 The Commission stated that, "[b]ecause it is virtually impossible for orders that are processed manually to be completed in the same time as orders that flow through electronically, it is difficult to see how equivalent access could exist when [the BOC] processes a significant number of orders from competing carriers manually."323 The Commission also noted that, "although there may be limited instances in which it is appropriate for [the BOC] to intervene manually in the processing stage so that orders are processed correctly into the legacy systems, excessive reliance on this type of manual processing, especially for routine transactions, impedes [the BOC's] ability to provide equivalent access to these fundamental OSS functions."324 We find that the low percentage of order flow through for competing carriers' resale orders not only is evidence that BellSouth's ordering systems are not working as advertised by BellSouth, but also is a substantial factor in BellSouth's inability to provide order status notices and to provision resale services on a timely basis, as described below.
- 108. BellSouth claims that, after adjusting for errors caused by new entrants in submitting orders, the flow-through rates for new entrant orders would be equivalent to the flow-through rates for BellSouth's own retail operations.³²⁵ The record does not, however, support these claims. BellSouth states that its analysis of competing carriers' orders shows that, in July 1997, competing carriers caused 50 percent of the total errors, and, in August 1997, 87 percent of the total errors.³²⁶ AT&T argues, however, that BellSouth does not explain how it determined which errors were caused by the actions of competing carriers as

See infra part VI.B.4.b(1).

Ameritech Michigan Order at para. 172-99; see Department of Justice Evaluation, App. A at A-22 to A-23.

³²³ Ameritech Michigan Order at para. 196.

¹²⁴ Id. at para. 178 (emphasis added).

See BellSouth Stacy OSS Aff. at para. 111.

³²⁶ *Id*.

opposed to BellSouth systems.³²⁷ We agree. Other than alleging that most of these errors were caused by competing carriers' actions, BellSouth does not provide credible evidence or explanation to substantiate its conclusions regarding the causes of order errors. As a point of contrast, in its application to provide in-region, interLATA services in Michigan, Ameritech did provide such information.³²⁸ BellSouth states that its conclusion that the high error rates are due to competing carriers' mistakes is the result of its SOER analysis, a term which is not defined elsewhere in its application.³²⁹ Without further evidence from BellSouth as to the cause of errors, we cannot accept BellSouth's assertion that competing carriers' errors are the primary reason for BellSouth's significant order rejection rate.

109. The evidence in the record in fact suggests that the significant number of order rejections cannot be attributed solely to new entrants. We note that every competing carrier attempting to use BellSouth's EDI interface is experiencing high order error rates.³³⁰ Indeed, if we assume that BellSouth's analysis of the order rejection rate is correct, it shows that competing carriers' error rates actually increased from July to August.³³¹ Moreover, BellSouth

For both July and August, BellSouth has provided the Commission with the number of orders eligible for mechanized order processing (i.e., order flow through), the number of orders that actually did flow through its ordering systems, and the number of orders that BellSouth asserts would have flowed through its systems if there were no "CLEC caused input errors." See id. Although BellSouth has provided aggregate data for carriers using both the EDI and LENS interfaces for ordering, as discussed above, we look only to the data for those carriers using the EDI interface. See supra note 306. Based on these numbers, we calculated the number of orders that BellSouth claims contained "CLEC caused input errors." Our final calculation, for each month, was to divide the number of competing carriers' orders containing "CLEC caused input errors" by the total number of competing carriers' orders eligible for order flow through. Therefore, in July, 1997, for the total number of orders sent by competing carriers, BellSouth claims that competing carriers caused errors for 30 percent of the

AT&T Bradbury Aff. at paras. 205-09. AT&T also contends that BellSouth's measurements are suspect because the data on error rates presented in BellSouth's application do not correlate with the data provided to AT&T as part of its interconnection agreement with BellSouth. *Id.* at para. 207 n.119.

See Ameritech Michigan Order at paras. 175, 179, 182. Ameritech provided information concerning different causes for broad categories of errors that competing carriers were experiencing with their EDI interface. Id.

In an ex parte conversation, BellSouth stated that SOER is an acronym for "service order error routine." See Letter from Whit Jordan, Vice President - Federal Regulatory, BellSouth, to William Caton, Acting Secretary, FCC (Nov. 17, 1997) (BellSouth Nov. 17, 1997 Ex Parte).

Public Ex. WNS-41; see MCI King Decl. at para. 135.

Public Ex. WNS-41. BellSouth provides data on the number of order errors measured against the total number of orders supported by mechanized processing. As discussed above, BellSouth also asserts that a certain percentage of those errors are due to errors by competing carriers. Based on the number of errors that BellSouth has assigned to competing carriers, we calculate that the percentage of errors committed by competing carriers, measured as a percentage of the total orders actually sent by competing carriers, increased from 30 percent in July to 51 percent in August. *Id.*

appears to acknowledge that some of the errors are attributable to its systems. It asserts that actions it took to correct nine categories of "internally caused error conditions" were responsible for the reduction of the order rejection rate from July to August.³³²

- Even if we were to assume that the high error rates were caused primarily by competing carriers' mistakes, we still could not conclude that BellSouth has met its burden of demonstrating that it is providing nondiscriminatory access. Because BellSouth has not provided information explaining the causes of order errors, as discussed above, we cannot make a judgment regarding how many of the errors assigned by BellSouth to the actions of competing carriers result from BellSouth's failure to provide information, such as business rules, concerning how BellSouth's internal systems process orders. As discussed in the Ameritech Michigan Order, business rules refer to the protocols that a BOC uses to ensure uniformity in the format of orders.³³³ Commenters contend that errors are caused because carriers were not properly informed of BellSouth's business rules.³³⁴ The Department of Justice concurs and asserts that BellSouth is not "adequately assisting competing carriers to understand how to implement and use all of the OSS functions available to them."335 Both the Department of Justice and competing carriers specifically cite BellSouth's failure to provide sufficient information concerning BellSouth's "internal editing and data formatting requirements" necessary for competing carriers' orders to be successfully processed through both BellSouth's interface and its internal systems.³³⁶
- 111. It is, of course, critical that BellSouth provide to competing carriers BellSouth's business rules concerning how its internal systems and databases process an order submitted via the EDI interface so that competing carriers can take affirmative steps to reduce potential errors. The Commission previously has concluded that BOCs have an affirmative obligation to provide such information and support to competing carriers "with all of the information necessary to format and process their electronic requests so that these requests flow through the interfaces, the transmission links, 337 and into the legacy systems as quickly and efficiently

total, and in August, 1997, BellSouth claims that competing carriers caused errors for 51 percent of the total.

BellSouth Stacy OSS Aff. at para. 112.

These protocols define valid relationships in the creation and processing of orders, as well as other interactions involved in the BOC's provision of OSS functions. *Ameritech Michigan Order* at para. 137 n.335.

See e.g., WorldCom Comments at 7; AT&T Comments at 29-30.

Department of Justice Evaluation, App. A at A-25 to A-26.

³³⁶ Id., App. A at A-26; AT&T Bradbury Aff. at paras. 140-70, 208.

Transmission links refer to those intermediate systems a BOC has deployed to translate or process orders received via an interface, such as BellSouth's EDI interface, to a format that can be understood and processed by the BOC's internal legacy systems. See Ameritech Michigan Order at paras. 134-35. As discussed above,

as possible."³³⁸ Such information must include all internal business rules, and ordering codes used by a BOC that competing carriers need to place orders through the system efficiently.³³⁹ We find that the evidence reasonably supports a conclusion that some of the competing carriers' errors were caused by BellSouth's failure to provide business rules and other pertinent information.

- 112. We also find that the lack of integration between BellSouth's interfaces for pre-ordering and ordering functions has contributed to competing carriers' error rates. This lack of integration requires new entrants manually to re-enter data obtained from the pre-ordering interface into the ordering interface, a process that reasonably can be expected to contribute to errors committed by new entrants. In contrast, the design of BellSouth's internal systems helps to minimize such errors for its retail operations. As discussed below in the pre-ordering section, we find that BellSouth has not provided the information that would allow a new entrant to integrate BellSouth's pre-ordering and ordering interfaces. We further find that BellSouth's manual return of order rejection notices has contributed to competing carriers' error rates. BellSouth's manual process for returning order rejection notices requires new entrants to manually enter error information from the faxed notice into the EDI interface. BellSouth's failure to integrate order rejection notices into the EDI interface also can be reasonably expected to contribute to errors committed by new entrants.
- 113. Another contributing factor to competing carriers' error rates is that the PC-EDI software BellSouth provides to competing carriers does not provide adequate capability to check for errors before the order is submitted to BellSouth.³⁴² Such error correction capabilities would allow competing carriers to reduce order errors by correcting errors before submitting orders to BellSouth. In contrast, BellSouth's retail systems include such error check capabilities.³⁴³ LCI also contends that BellSouth has not provided adequate training necessary to use the PC-EDI software properly.³⁴⁴ As a result of these and other problems

BellSouth employs the LEO and LESOG systems, and its LCSC personnel to process orders to a format that its legacy systems, beginning with its SOCS system, can understand and process to completion.

³³⁸ Id. at para. 137.

³³⁹ Id. Ordering codes include such information as universal service ordering codes (USOCs) and field identifiers (FIDs). Id. at para. 137 n.336.

³⁴⁰ See infra part VI.B.5.

See infra part VI.B.4.b(1).

See e.g., LCI Comments at 2.

Florida Commission Section 271 Order at 169-71.

LCI Comments at 2.

with PC-EDI, LCI states that it has stopped using it and returned to submitting orders manually.³⁴⁵

- 114. In sum, we find that BellSouth has not adequately explained or supported its contention that the errors of competing carriers are the cause of its EDI interface's high rejection rate. Instead, the record evidence supports a finding that the high error rates are due, to a significant degree, to BellSouth's failure to meet its obligation to provide competing carriers with information and support concerning the effective use of the EDI interface. We also find that deficiencies in BellSouth's OSS access, such as the lack of integration between the pre-ordering and ordering functions, are contributing to competing carriers' high error rates. We find that the high rejection rate of BellSouth's EDI interface precludes competing carriers from obtaining nondiscriminatory access to ordering and provisioning functions. At the very least, these high rejection rates are evidence that the systems BellSouth has deployed still require considerable improvement before they may be used in a manner that provides nondiscriminatory access to competing carriers. Also, as explained below,³⁴⁶ the high rejection rate is of major concern because BellSouth has failed to implement a timely and effective means to notify competing carriers of problems with their orders.
 - b. BellSouth does not provide order status notices to competing carriers in substantially the same time and manner as it does for itself.
- 115. It is critical to a competing carrier's ability to compete through the use of resale services that it receive information concerning the status of its customers' orders in substantially the same time and manner as the BOC provides such information to its retail operations. In the *Ameritech Michigan Order*, the Commission noted the importance of order status notices because they "allow competing carriers to monitor the status of their resale orders and to track the orders both for their customers and their own records." Competing carriers using resale to provide service to customers would be significantly disadvantaged if they were unable to provide their customers with such basic information concerning their telephone service. For example, because BellSouth does not confirm the date when the service ordered by the competing carrier will be installed until the delivery of the firm order confirmation (FOC) notice to the competing carrier, the competing carrier depends upon timely delivery of such notice in order to inform its customers of the time of service installation. This information becomes even more critical if the customer needs to coordinate the installation of service with other activities, such as a move to a new location. Similarly, if BellSouth does not provide timely notice to the competing carrier that service can no longer

LCI Baffer Decl. at para. 6; see Department of Justice Evaluation, App. A at A-29 n.45.

³⁴⁶ See infra part VI.B.4.b(1).

³⁴⁷ Ameritech Michigan Order at para. 186. Order status notices include, at a minimum, order receipt, order rejection, firm order confirmation (FOC), order jeopardy, and order completion.

be provided on the assigned due date, the competing carrier will not be able to make alternate arrangements with its customer. If the competing carrier is never informed by BellSouth of changes to the due date, the customer will be likely to blame the competing carrier for the failure to install service on time, even if the competing carrier is completely without fault.

116. Evidence in the record indicates that BellSouth is not providing order status notices to competing carriers in substantially the same time and manner that it provides them to itself. We find that, in particular, BellSouth is not providing order rejection notices, FOC notices, and order jeopardy notices in substantially the same time and manner as it does for its own retail services.

(1) Order Error and Rejection Notices

- 117. Timely delivery of order rejection notices has a direct impact on a new entrant's ability to serve its customers, because new entrants cannot correct errors and resubmit orders until they are notified of their rejection by BellSouth.³⁴⁸ Instead of sending order rejection notices via its EDI interface, rejected orders are reviewed for errors by a BellSouth LCSC employee, and a written error rejection notice is then sent back to the new entrant via facsimile.³⁴⁹ New entrants contend that, in comparison, BellSouth provides electronic notification of order errors to its retail operations.³⁵⁰
- 118. The evidence in the record suggests two particular problems with BellSouth's manual notification process. First, the evidence indicates that BellSouth does not provide competing carriers with the notices in a timely manner. AT&T submits data for August 1997 that show BellSouth provided AT&T with order rejection notices within one hour of order submission only six percent of the time.³⁵¹ BellSouth, on the other hand, has supplied us with no comparative data indicating how long it takes BellSouth to receive the equivalent of an error notice for its own orders. However, there is evidence that BellSouth's retail operations, depending on where the error occurs in its systems, receive the equivalent of an error notice between a few seconds to thirty minutes after entering an order.³⁵² In the *Ameritech Michigan*

³⁴⁸ See AT&T Comments, App., Vol. IX, Ex. J, Affidavit of C. Michael Pfau (AT&T Pfau Aff.) at para. 42; MCI King Decl. at paras. 133-35.

BellSouth Stacy OSS Aff. at paras. 75-77.

MCI King Decl. at paras. 132-33. We believe that the BOC performs the functional equivalent of an error notice for itself even if it does not do so in an identical manner. *Cf. Ameritech Michigan Order* at para. 139.

AT&T Bradbury Aff. at para. 204 & Attach. 42. AT&T states that, in its interconnection agreement, BellSouth agreed to use its best efforts to provide AT&T with an order rejection notice within one hour of order submission. *Id.* at paras. 203-04.

³⁵² Florida Commission Section 271 Order at 161-62, 169-70.

Order, the Commission stressed that, if the BOC performs an analogous activity for its retail operations, it needs to provide comparative information in its application to demonstrate its compliance with the nondiscriminatory standard in the Act. Because BellSouth has not provided us information on how long it takes its own representatives to receive notices of errors, we cannot determine from this record what the appropriate time would be for BellSouth's provision of order rejection notices to competing carriers to demonstrate parity. We are concerned, however, that BellSouth has consistently failed to meet the standard identified in its interconnection agreement with AT&T. We expect, BellSouth, therefore, to submit appropriate comparative data on the timeliness of error rejection notices to support any future claims that it is providing nondiscriminatory access to OSS functions.

- 119. Second, competing carriers argue that BellSouth's failure to return error notices via the EDI interface creates additional delay in the ordering process, and that the error notices competitive carriers do receive are insufficient and inconsistent, often requiring further clarification from BellSouth.³⁵³ Competing carriers argue that the return of order rejection notices outside of the EDI interface creates additional delay in the ordering process due to their need to monitor facsimile machines, and route order rejection notices to appropriate personnel.³⁵⁴ Competing carriers also contend that, because BellSouth's order rejection notices do not contain codes clearly identifying the nature of errors, competing carriers suffer from additional delays and errors caused by their need to interpret the order rejection notice.³⁵⁵
- 120. We conclude that BellSouth's manual provision of order rejection notices to competing carriers via facsimile is not equivalent access to that which BellSouth provides its retail operations. BellSouth provides the equivalent of order rejection notices to its retail operations through electronic ordering interfaces. If a BOC provides itself with an electronic interface as a means to obtain access to a particular OSS function, it must provide "equivalent electronic access for competing carriers." Compared to a BOC's use of an electronic interface, competing carriers using a manual process, such as facsimile-based ordering, are at a significant disadvantage. Manual processes, as discussed above, are generally less timely and more prone to errors than electronic interfaces.

AT&T Bradbury Aff. at paras. 102-04.

³⁵⁴ Id.; see Department of Justice Evaluation, App. A at A-23 n.36.

AT&T Bradbury Aff. at para. 103 (competing carriers must interpret the BellSouth representative's handwritten description of the error); MCI Comments at 13-15.

³⁵⁶ See generally Florida Commission Section 271 Order at 169.

³⁵⁷ Ameritech Michigan Order at para. 137; see Local Competition Order, 11 FCC Rcd at 15766-67 ("[A]n incumbent that provisions network resources electronically does not discharge its obligation under section 251(c)(3) by offering competing providers access that involves human intervention, such as facsimile-based ordering."); Local Competition Second Reconsideration Order, 11 FCC Rcd at 19739.

BellSouth, however, contends that it did not include error notices in its EDI interface because the current version of the EDI standard which was approved by the OBF did not include specifications for transmission of error notices.³⁵⁸ In its application, BellSouth states that it plans to provide error messages through the EDI interface when it implements the next version of the EDI standard in the first quarter of 1998.³⁵⁹ In response, competing carriers assert that they have requested electronic notification of error messages from BellSouth, and that they proposed several alternative methods of providing such messages through the EDI interface.³⁶⁰ AT&T states that BellSouth, in their interconnection agreement, had agreed to provide AT&T with electronic notification of rejection notices by March 31, 1997.³⁶¹ We therefore reject any contention by BellSouth that it was not obligated to provide electronic error notification because of a lack of industry standards. We have previously rejected arguments that a lack of industry standards excuses an incumbent LEC from meeting its obligation to provide nondiscriminatory access to OSS functions. 362 Nor do we believe that there is any technical obstacle to providing electronic error notification.³⁶³ We note that at least one other BOC, Ameritech, does provide electronic notification of error messages through an EDI interface.³⁶⁴

(2) Firm Order Confirmation Notices

122. We also find that BellSouth is not providing firm order confirmation (FOC) notices on a timely basis. BellSouth states that a FOC notice is sent to competing carriers over the EDI interface when an order has been accepted by BellSouth's SOCS system.³⁶⁵ In the *Ameritech Michigan Order*, the Commission concluded that the retail analogue of a FOC notice occurs when an order placed by the BOC's retail operations is recognized as valid by

BellSouth Stacy OSS Aff. at para. 75. BellSouth states that its current EDI interface is compliant with Version 6.0 of the OBF EDI standard. *Id*.

ld. On reply, BellSouth states that it will provide an initial version of electronic error notification in November 1997. BellSouth Stacy OSS Reply Aff. at para. 47.

AT&T Bradbury Aff. at para. 102; MCI King Decl. at para. 131-136.

AT&T Comments at 35; AT&T Bradbury Aff. at para. 102; AT&T Pfau Aff. at para. 44; see BellSouth Application, App. B, Vol. 8, Tab 69, BellSouth-AT&T Interconnection Agreement (June 2, 1997) § 28.6.4 (BellSouth-AT&T Interconnection Agreement).

³⁶² See Second Local Competition Reconsideration Order, 11 FCC Rcd 19738, 19744-45.

³⁶³ See Local Competition Order, 11 FCC Rcd at 15765.

³⁶⁴ Ameritech Michigan Order at para. 186.

BellSouth Stacy OSS Aff. at para. 75.

its internal OSS.³⁶⁶ The Commission concluded that the BOC needs to provide FOC notices to competing carriers in substantially the same time that its retail operations receive the retail analogue.³⁶⁷ The timely return of a FOC notice or an order rejection notice (discussed above) is critical to competing carriers, because the failure to receive either notice in a timely manner prevents competing carriers from providing the same level of service and information to their customers that the BOC can provide to its retail customers.³⁶⁸ As the Commission stated in the *Ameritech Michigan Order*, "as long as a competing carrier has not received a FOC, the competing carrier, as well as the customer, is unaware of the status of its order.³⁶⁹ Moreover, the FOC notice also performs the critical function of confirming the due date for installation.³⁷⁰ As noted in the pre-ordering discussion below, the ability of new entrants to obtain due dates over the LENS pre-ordering system with any degree of confidence is highly constrained. Thus, the first opportunity competing carriers may have to inform their customers of the due date is when the FOC notice is returned. Delays in the return of the FOC notice therefore delay a new entrant's ability to inform its customers when service will begin.³⁷¹

of FOC notices to competing carriers, or how long it takes to provide the equivalent information to its retail operations. In the *Ameritech Michigan Order*, the Commission directed Ameritech to provide such information in subsequent applications.³⁷² BellSouth states that it intends to measure the time to deliver FOC notices to competing carriers, but that such data were not available when it filed its application.³⁷³ AT&T contends, however, that BellSouth had already provided AT&T with data on delivery of FOC notices for the month of August, and that BellSouth should have provided such data in its application.³⁷⁴ BellSouth does not dispute that it provided such data to AT&T and not to us, but claims instead that data on the delivery of FOC notices in the aggregate are meaningless, given the different

Ameritech Michigan Order at para 187 n.479.

³⁶⁷ *Id*.

³⁶⁸ See id. at para. 186.

³⁶⁹ *Id.* at para, 187.

As discussed in the pre-ordering section, because BellSouth does not provide a means for competing carriers to reserve due date intervals, due date information received in FOC notices becomes even more critical to competing carriers' ability to provide accurate information to their customers.

See e.g., AT&T Bradbury Aff. at para. 202.

³⁷² Ameritech Michigan Order at para. 187.

BellSouth Stacy Performance Measures Aff. at para. 43.

³⁷⁴ AT&T Bradbury Aff. at para. 199 & n.113.

performance standards for the return of FOC notices in individual interconnection agreements.³⁷⁵

- 124. Evidence submitted by AT&T shows that, for 38 percent of the orders it submitted in August, BellSouth took longer than 24 hours to return a FOC notice, the time that BellSouth agreed to in its interconnection agreement with AT&T.³⁷⁶ AT&T argues that BellSouth's actual performance is probably worse than demonstrated by these statistics because BellSouth did not include information on those orders BellSouth processed manually.³⁷⁷ As we noted above, the vast majority of orders to date have required manual intervention by BellSouth to complete order processing. LCI states that it received only ten percent of its FOC notices from BellSouth within 24 hours of submitting an order, and that on average it has taken seven days from submission of an order to receive a FOC notice.³⁷⁸ Intermedia contends that BellSouth has consistently missed its commitment to provide a FOC notice within 48 hours of order submission.³⁷⁹ Intermedia states that it never received a FOC notice for 37 percent of the orders it submitted to BellSouth between August 9 and October 7, 1997.³⁸⁰
- delivery of FOC notices to competing carriers with how long it takes BellSouth's retail operations to receive the equivalent of a FOC notice for its own orders, BellSouth has not provided any evidence to demonstrate that it is providing nondiscriminatory access. In the *Ameritech Michigan Order*, the Commission specifically requested that BOCs provide information on how long it takes them to provide the equivalent of a FOC notice to their retail operations. BellSouth has simply failed to provide any data on its performance of this activity. We are also not persuaded by BellSouth's arguments that it should not provide data on its delivery of FOC notices to competing carriers because it has agreed to different performance intervals in its interconnection agreements. We find that BellSouth should present the data and then it may make such arguments to explain or clarify why aggregate

BellSouth Stacy Performance Measures Reply Aff. at para. 12.

AT&T Bradbury Aff. at 97, Attach. 42. AT&T's interconnection agreement requires BellSouth to provide FOC notices in 24 hours. See BellSouth-AT&T Interconnection Agreement § 28.5.3.

AT&T Comments at 34. BellSouth acknowledges that it only includes those orders that flow through without human intervention in its measure of FOC timeliness. BellSouth Stacy OSS Aff., Ex. WNS-52 (Local Competition Operational Readiness Report) at 128.

LCI Comments, App., Tab 3, Declaration of Beth Rausch (LCI Rausch Decl.) at paras. 4-7.

³⁷⁹ Intermedia Comments at 23.

³⁸⁰ *Id*

³⁸¹ Ameritech Michigan Order at para. 187.

data may not be useful given differing performance intervals in its interconnection agreements.³⁸² In addition to providing aggregate data, BellSouth may also disaggregate its data to account for the impact of different performance intervals in its interconnection agreements. Regardless of the targets agreed to in its interconnection agreements, in order to obtain section 271 authorization, BellSouth must demonstrate that it meets its obligations to provide competing carriers with nondiscriminatory access to OSS functions, including the provision of order status notices such as FOC notices.

- 126. We reiterate that, for a BOC to demonstrate compliance with the nondiscriminatory standard of the Act, it must provide data for both its provision of FOC notices to competing carriers and the time it takes its retail operation to receive the equivalent of a FOC notice. Moreover, we conclude, based on the evidence submitted by AT&T, LCI, and Intermedia, evidence which is not refuted by BellSouth, that BellSouth is not providing competing carriers FOC notices on a timely basis.
- 127. In its reply comments, BellSouth asserts that, after receiving a properly formatted order, it generally provides a firm order confirmation within 24 hours. As evidence, BellSouth states on reply that, for the week ending October 19, 1997, BellSouth provided to ACSI 68 percent of its FOC notices within 24 hours, and for the week ending October 12, 1997, BellSouth provided to Sprint 86 percent of its FOC notices within 24 hours. BellSouth contends that competing carriers that are not receiving FOC notices within 24 hours are not formatting their orders correctly.
- 128. We are not persuaded by this new evidence. First, BellSouth's evidence presents data concerning BellSouth activity after the date of its application, and indeed, to some extent, post-dates the time that comments were filed. Evidence that concerns BellSouth's post-application performance is not demonstrative of its performance at the time of the application. Therefore, we will give this evidence no weight. Second, even if we were to consider the evidence, we would not find these data to be persuasive. Instead of providing evidence of BellSouth's performance for all carriers, BellSouth provides only a selected week's data on its performance for two carriers. Moreover, the evidence in the record indicates that neither Sprint nor ACSI is using the EDI interface upon which BellSouth relies to provide ordering functions on a nondiscriminatory basis. BellSouth provides no evidence to refute the information provided by AT&T, LCI, and Intermedia. Furthermore, we are

³⁸² See id. at para. 170.

BellSouth Stacy OSS Reply Aff. at para. 56.

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³⁸⁵ BellSouth Reply Comments at 45-46.

Ameritech Michigan Order at para. 49-51.

troubled by BellSouth's assertion that its performance for ACSI is in compliance with the nondiscrimination requirement of the Act, given that BellSouth missed its own 24 hour standard in approximately one third of the cases. Finally, we are not convinced, as BellSouth asserts, that competing carrier errors are directly responsible for BellSouth's failure to provide timely FOC notices. Competing carrier orders that are truly in error should receive timely order rejection notices, not untimely FOC notices. Further, as discussed above, we find that BellSouth has not provided evidence or explanation to support its contention that most errors in the ordering process are caused by new entrants. To the extent that such errors cause orders to drop to manual processing and in turn delay the return of a FOC notice to the competing carrier, it is unacceptable for BellSouth to place all of the responsibility for such delays on the competing carrier.

129. Finally, we are concerned that BellSouth has not included orders that require manual processing in its data on the return of FOC notices to competing carriers. It is those orders that are processed manually that are the most susceptible to delays and errors due to human intervention.³⁸⁷ We would expect BellSouth, in a future application, to submit comparative data for FOC notices, including data for those orders manually processed, that support its claim to provide nondiscriminatory access to OSS functions.³⁸⁸

(3) Order Jeopardy Notices

- 130. After a competing carrier has received a FOC notice with a committed due date for the installation of a customer's service, it is critical that the BOC provide the competing carrier with timely notice if the BOC, for any reason, can no longer meet that due date.³⁸⁹ These notices are called order jeopardy notices. The failure to meet scheduled due dates is likely to have a significant competitive impact on new entrants' ability to compete, regardless of whether the delay is actually caused by the BOC. To the extent that the BOC does not provide timely order jeopardy notices to the competing carrier, the impact of missed due dates will be compounded by the inability of the competing carrier proactively to inform its customer and reschedule the time for service installation.
- 131. Evidence in the record shows that BellSouth is not providing order jeopardy notices to competing carriers when the due date cannot be met because of delays caused by BellSouth.³⁹⁰ We understand that BellSouth separates order jeopardy notices into those that are caused by competing carriers or their customers, and those that are caused by BellSouth

³⁸⁷ See id. at para. 173.

³⁸⁸ *Id.* at para. 187.

See, e.g., MCI Comments at 16-18.

Department of Justice Evaluation, App. A at A-23; LCI Baffer Decl., Ex. A at 2.

itself.³⁹¹ BellSouth provides competing carriers with notice of those order jeopardies caused by the competing carrier or its customer, but not for delays caused by BellSouth.³⁹² When BellSouth cannot meet a committed due date, it is critical that the competing carrier be informed in a timely manner so that it can contact its customer in order to schedule another due date. We therefore find that, because BellSouth fails to provide order jeopardy notices for those delays caused by BellSouth, it is not providing competing carriers with nondiscriminatory access to OSS functions.

c. Need to Provide Actual Installation Intervals

- 132. Our requirement that a BOC demonstrate that it is providing nondiscriminatory access to the various systems that comprise OSS serves to ensure that a competing carrier can provide service to its customers, using the BOC's resold service, in substantially the same time and manner that the BOC provides to its own retail customers. This concern is driven by the fact that the competing carrier's ability to provide timely service to its end user customers is, in large measure, dependent on the ability of the BOC to process competing carriers' orders for resale in a timely manner. Therefore, a critical measure of parity is whether the time required for a competing carrier's customer to receive service is substantially the same as the amount of time for a BOC to provide retail service to a customer. In the Ameritech Michigan Order, the Commission concluded that a BOC's submission of data showing average installation intervals for both resale and retail services is fundamental to demonstrating nondiscriminatory access to OSS functions.³⁹³ The Commission stated that such data are direct evidence of whether a BOC takes substantially the same time to complete installations for new entrants as it does for its own retail operations, which is integral to the concept of equivalent access.³⁹⁴
- 133. To demonstrate parity in its provision of resale services, BellSouth initially provided two performance measurements.³⁹⁵ The first measure, the "percentage of provisioning appointments met," shows how often BellSouth meets the due dates it has

BellSouth Stacy OSS Reply Aff. at para 47; see MCI King Decl. at paras. 137-140.

See MCI King Decl. at para. 137-39. In addition, BellSouth provides this limited jeopardy notice via facsimile. BellSouth Stacy OSS Aff. at para. 77. As stated above in our discussion of order rejection notices, such a manual process does not provide competing carriers with equivalent access when BellSouth provides electronic notification to itself.

Ameritech Michigan Order at para. 166-67, 170-71.

^{10.;} see also Department of Justice Evaluation, App. A at A-34.

As discussed below, BellSouth provided an additional measure, "issue date to completion date," on reply.

assigned to itself and how often BellSouth meets the due dates it has assigned to new entrants.³⁹⁶ The second measure, labeled "service order intervals," shows the average length of the due date assigned by BellSouth's SOCS system to both BellSouth's retail orders and new entrants' resale orders.³⁹⁷

134. We conclude that these measures are not sufficient to demonstrate parity. First, both measures only begin their analysis once an order has cleared BellSouth's SOCS systems. By beginning the interval at the time the order clears BellSouth's SOCS system, rather then when the order is first submitted, these measures fail to capture the delays in order processing time caused by the high order rejection rates discussed above.³⁹⁸ In addition, BellSouth's measures do not provide information on the time it takes BellSouth actually to install service. Rather, they simply measure whether assigned due dates have been met. They may thus mask discriminatory treatment of competing carriers' orders. As explained by the Department of Justice:

Fundamentally, a report that shows the side of the line on which an order falls, either met or missed, does not reveal where it is in the range. As to provisioning appointments met, if all CLEC customers receive service on the due date while all BellSouth retail customers receive service in half the scheduled time, then a report of provisioning appointments met will show parity of performance, not revealing the discriminatory difference in performance between BellSouth and the CLEC. Likewise, as to provisioning appointments missed, if all BellSouth retail customers receive service after one additional day while all CLEC customers receive service after five additional days, then a report of provisioning appointments met will again show parity of performance and fail to reveal the discriminatory difference.³⁹⁹

We agree with the Department of Justice and therefore conclude that the measurements provided by BellSouth can mask discriminatory conduct, because they do not permit a direct comparison to BellSouth's retail performance. The Commission noted similar concerns

³⁹⁶ See BellSouth Stacy Performance Measures Aff. at paras. 19-20 & WNS-1. BellSouth began providing data concerning its region-wide performance for this measurement in February of this year, and for its performance in South Carolina, beginning in July. BellSouth separates this data in two ways. It provides separate data for residential and business services, and it provides separate data for those orders that require the dispatch of a technician and those that do not. *Id.*, Ex. WNS-1.

³⁹⁷ See *id.* at paras. 52-53. BellSouth states that it is providing this measure in response to discussions with the Department of Justice, but that it will not provide this data on an ongoing basis. *Id.* The service order interval measure shows how many orders were assigned a due date of one day, two days, three days, four days, five days, and over five days. *Id.*, Ex. WNS-10.

³⁹⁸ See Department of Justice Evaluation, App., Ex. 3, Affidavit of Michael J. Friduss (Department of Justice Friduss Aff.) at para. 60 (the average [installation] interval "is very visible to end users and highly correlates with their perception of their service provider").

See Department of Justice Evaluation, App. A at A-34 to A-35.

ld., App. A at A-34; AT&T Pfau Aff. at paras. 20-21.

with the measurements Ameritech submitted in its section 271 application for Michigan. Although we believe that BellSouth's current measurements do provide some useful information, without data that meaningfully compares the average installation intervals for BellSouth's resale and retail services, we are unable to conclude that BellSouth is providing access to OSS functions on a nondiscriminatory basis.

- In the Ameritech Michigan Order, the Commission clearly stated that a section 271 application, as originally filed, must include all of the factual evidence on which the applicant would have the Commission rely in making its findings.⁴⁰² Nonetheless, on reply, BellSouth, for the first time, proposes another performance measure. This measure shows data on the average interval from "issue date to completion date." Specifically, the measurement tracks the average interval from the time that BellSouth's SOCS system accepts the competing carrier's order as valid (i.e., it is not rejected) to the time of actual completion of service installation by BellSouth. 404 The data provided by BellSouth for this measure concern activity that occurred after the date of BellSouth's application. 405 We find that BellSouth's submission of information concerning average installation intervals in its reply comments to be procedurally and substantively inadequate. First, BellSouth's presentation of new evidence on reply does not provide commenters a fair opportunity for review. Moreover, the data concern BellSouth activity after the date it filed its application. Under our procedures governing section 271 applications, a BOC may provide information that postdates the filing of its application if the information is necessary to respond directly to arguments or factual information submitted by commenters. The Department of Justice and other parties that commented on BellSouth's failure to provide data showing actual installation intervals, however, did not do so in a manner that raised issues with BellSouth's performance after the date of its application. In fact, it is specifically BellSouth's performance at the time of its application that is at issue. Therefore we will give this evidence no weight.
- 136. Even if we were to consider BellSouth's evidence, it would not be persuasive. Although BellSouth's data may in fact measure the time between the "issue date" and the "completion date," that is, when service is actually installed, this interval is still an inadequate measure. This is because, like the measurement originally submitted by BellSouth, it only measures the interval from when the order clears BellSouth's systems rather than when the

⁴⁰¹ Ameritech Michigan Order at paras. 164-71.

ld. at para. 153; see Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in Michigan, CC Docket No. 97-1, Order, 12 FCC Rcd 3309, 3318 (Ameritech Michigan February 7th Order); December 6th Public Notice at 2.

⁴⁰³ BellSouth Stacy Performance Measures Reply Aff., Ex. 2.

⁴⁰⁴ Id., Ex. 2; see BellSouth Nov. 17, 1997 Ex Parte.

BellSouth Stacy Performance Measures Reply Aff., Ex. 2.

See discussion supra paras. 39-45.